

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
21 July 2005 (21.07.2005)

PCT

(10) International Publication Number
WO 2005/067153 A1

(51) International Patent Classification⁷:
7/40, G06F 17/30

H03M 7/30,

(72) Inventor; and

(75) Inventor/Applicant (for US only): **MOREL, Anthoy**
[FR/CN]; Philips Electronics China, 21/F Kerry Office
Building 218 Tian Mu, Xi Road, Shanghai 200070 (CN).

(21) International Application Number:
PCT/IB2004/052842

(74) Common Representative: **KONINKLIJKE PHILIPS**
ELECTRONICS N.V.; c/o HAQUE, Azir, Philips Elec-
tronics China, 21/F Kerry, Office Building, 218 Tian Mu
Xi Lu Road, Shanghai 200070 (CN).

(22) International Filing Date:
17 December 2004 (17.12.2004)

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

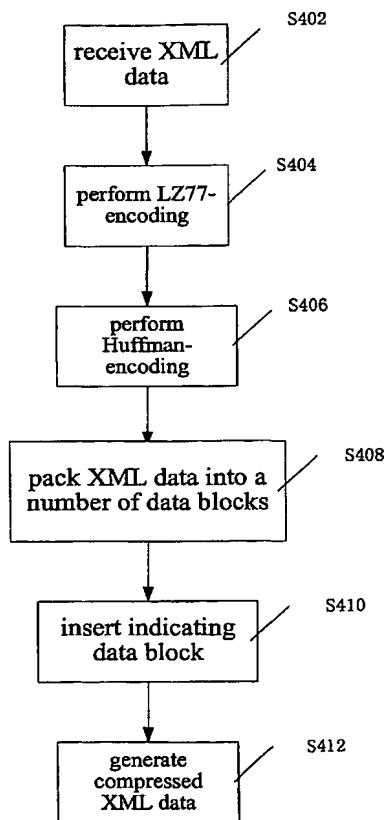
(25) Filing Language: English
(26) Publication Language: English
(30) Priority Data:
200310124520.5
30 December 2003 (30.12.2003) CN

(71) Applicant (for all designated States except US): **KONIN-
KLIJKE PHILIPS ELECTRONICS N.V. [NL/NL]**
Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).

[Continued on next page]

(54) Title: RAPIDLY QUERYABLE DATA COMPRESSION FORMAT FOR XML FILES

(57) **Abstract:** A method and device for XML compression with easy
querying are provided. An XML file is parsed with a SAX-parser,
useless characters such as tabulators and white spaces are removed,
indicating data marks are inserted, LZ-77 compression is applied, and
finally the data are Huffman-encoded and packed in data blocks. The
indicating marks are used to search in the compressed file for tags or
literals in the document, based e.g. on alphabetical order. The indicating
marks consist of a special character such as a tab and an XML
comment; hence they are XML-compatible. The organization of the
compressed file in independent data blocks facilitates rapid querying
and partial decompression of the compressed file.



WO 2005/067153 A1



(84) **Designated States** (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM,

PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

Published:

- with international search report
- with amended claims and statement

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.